

supplying the reactor with organic metal source gases comprising lead, zirconium, and titanium via the plurality of nozzles, wherein the organic metal source gases are diluted with a diluent gas;

supplying the reactor with an oxidizing gas via the separate discharge nozzle;
and

forming a ferroelectric film on the substrate, the ferroelectric film comprising a perovskite crystal structure formed by an oxide comprising lead, zirconium, and titanium,

wherein a total pressure in the reactor is at least about 0.1 Torr.

✓2. (Twice amended) The method of claim 1, wherein

the oxidizing gas and the organic metal source gases of lead and titanium are supplied to the substrate at a pressure ranging from about 0.001 Torr to about 0.01 Torr.

✓3. (Twice amended) The method of claim 1, wherein

the oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate at a pressure ranging from about 0.001 Torr to about 0.01 Torr.

✓4. (Twice amended) The method of claim 1, wherein

the oxidizing gas and the organic metal source gases of lead and titanium diluted with the diluent gas are supplied to the substrate at a pressure of at least about 0.1 Torr.

✓5. (Twice amended) The method of claim 1, wherein

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